

CLAIMS

1. A method of sealing a battery cell having a top surface, a bottom surface and peripheral edges, the method comprising the steps of:

(a) positioning a first layers of packaging foil over the top surface of the battery cell;

(b) positioning a second layer of packaging foil over the bottom surface of the battery cell; and

(c) heat sealing the first layer of packaging foil to the top surface of the battery cell, heat sealing the second layer of packaging foil to the bottom surface of the battery cell, and heat sealing the first layer of packaging foil to the second layer of packaging foil about the periphery of the battery cell.

2. The method of claim 1 wherein said first layer and said second layer of packaging foil are multi-layered laminates which includes at least one metallic layer and at least one polymer layer.

3. The method of claim 1 wherein step (c) the heat sealing is conducted in part by two oppositely disposed pressure applying means between which the top layer, battery cell and bottom layer are passed.

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4. The method of claim 1 wherein step (c) the first layer is sealed to a majority of the top surface of the battery cell.

5. The method of claim 4 wherein step (c) the second layer is sealed to a majority of the bottom surface of the battery cell.

6. The product formed by the method of claim 1.

7. A method of sealing a battery cell having a top surface, a bottom surface and peripheral edges, the method comprising the steps of:

- (a) providing a first layer of packaging foil;
- (b) providing a second layer of packaging foil;
- (c) positioning a battery cell between the first and second layers of packaging foil;
- (d) heating the first and second layer of packaging foil; and
- (e) pressing the first layer against the top surface of the battery cell and pressing the second layer against the bottom surface of the battery cell,

whereby the heating and pressing of the first and second layers against the battery cell causes the first and second layers to be sealed to the battery cell.

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8. The method of claim 7 wherein said first layer and said second layer of packaging foil are multi-layered laminates which includes at least one metallic layer and at least one polymer layer.

9. The method of claim 7 wherein step (e) the pressing of the packaging foils against the battery cell is conducted by two oppositely disposed pressure applying means between which the top layer, battery cell and bottom layer are passed.

10. The method of claim 7 wherein step (e) the first layer is sealed to a majority of the top surface of the battery cell.

11. The method of claim 10 wherein step (c) the second layer is sealed to a majority of the bottom surface of the battery cell.

12. The product formed by the method of claim 7.

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13. A method of sealing a battery cell having an exterior top surface, an exterior bottom surface and exterior peripheral edges, the method comprising the steps of:

(a) providing two sheets of overlaying packaging foils;

(b) positioning a battery cell between the two sheets of packaging foil;

(c) heat sealing the packaging foil to the exterior surface of the battery cell.

14. The method of claim 13 wherein the packaging foil is comprised of multi-layered laminates which includes at least one metallic layer and at least one polymer layer.

15. The method of claim 14 wherein step (c) the packaging foil is sealed to a majority of the exterior surface of the battery cell.

16. The product formed by the method of claim 13.

17. A thin film battery comprising:

a battery cell having a cathode, an anode and an electrolyte;

a packaging foil encapsulating said battery cell, said packaging foil being sealed to the majority of the exterior surface of said battery cell.

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18. The method of claim 17 wherein said packaging foil is comprised of multi-layered laminates which includes at least one metallic layer and at least one polymer layer.

19. A thin film battery comprising:

a battery cell having a top surface, a bottom surface and peripheral side edges extending between said top surface and said bottom surface;

a packaging foil sealed to said battery cell top surface, to said battery cell bottom surface, and to said battery cell side edges.

20. The method of claim 19 wherein said packaging foil is comprised of multi-layered laminates which includes at least one metallic layer and at least one polymer layer.

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